

# RAW SEQUENCE LISTING PATENT APPLICATION US/08/812,393A

DATE: 07/07/98 TIME: 09:45:43

INPUT SET: S27223.raw

This Raw Listing contains the General Information Section and up to the first 5 pages.

(1) General Information  (i) APPLICANT: SHERMAN, Linda A. LUSTGARTEN, Joseph  (ii) TITLE OF THE INVENTION: RECOMBINANT CONSTRUCTS ENCODING T CELL RECEPTORS SPECIFIC FOR HUMAN HLA-RESTRICTED TUMOR ANTIGENS  (iii) NUMBER OF SEQUENCES: 64  (iv) CORRESPONDENCE ADDRESS: (A) ADDRESSEE: MORRISON & FOERSTER (B) STREET: 2000 Pennsylvania Avenue, NW, suite 5500 (C) CITY: Washington (C) CITY: Washington (E) COUNTRY: USA (F) ZIP: 20006-1888  (v) COMPUTER READABLE FORM: (A) MEDIUM TYPE: DISKette (B) COMPUTER: IBM Compatible (C) OPERATING SYSTEM: DOS (D) SOFTWARE: FastSEQ for Windows Version 2.0  (vi) CURRENT APPLICATION DATA: (A) APPLICATION NUMBER: 08/812,393 (B) FILING DATE: 05-MAR-1997 (C) CLASSIFICATION: (Vii) PRIOR APPLICATION DATA: (A) APPLICATION NUMBER: (B) FILING DATE: (C) CLASSIFICATION NUMBER: (B) FILING DATE: (C) CRESERENCE/DOCKET NUMBER: 31333-20001.00	1 2		SEQUENCE LISTING ENTERE
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46 (B) TELEFAX: 202-822-0168			· ·
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#### RAW SEQUENCE LISTING PATENT APPLICATION US/08/812,393A

DATE: 07/07/98 TIME: 09:45:45

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76			35					40					45				
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78	ATC	TTT	ACA	AAC	CAG	GTG	CAG	TGG	TTT	TAC	CAA	CGT	CCT	GGG	GGA	AGA	192
79	Ile	Phe	Thr	Asn	Gln	Val	Gln	Trp	Phe	Tyr	Gln	Arg	Pro	Gly	Gly	Arg	
80		50					55					60					
81																	
82	CTC	GTC	AGC	CTG	TTG	TAC	AAT	CCT	TCT	GGG	ACA	AAG	CAG	AGT	GGG	AGA	240
83	Leu	Val	Ser	Leu	Leu	Tvr	Asn	Pro	Ser	Glv	Thr	Lvs	Gln	Ser	Glv	Arq	
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85	0.5																
86	CTC	ACA	TCC	ACA	ACA	GTC	Δጥጥ	ΔΔΔ	GAA	ССТ	CGC	AGC	ጥርጥ	TTG	CAC	ΔТТ	288
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91	Ser	Ser	Ser		TTe	Thr	Asp	Ser		unr	Tyr	Leu	cys	Ala	Ser	Asn	
92				100					105					110			
93														_			
94														ACT			384
95	Ser	Gly	Gly	Ser	Asn	Ala	Lys	Leu	Thr	Phe	Gly	Lys	Gly	Thr	Lys	Leu	
96			115					120					125				
97																	
98	TCT	GTT	AAA	TCA	GGT	GGC	GGA	GGG	TCT	GGC	GGG	GGT	GGA	TCC	GGG	GGT	432
99	Ser	Val	Lys	Ser	Gly	Gly	Gly	Gly	Ser	Gly	Gly	Gly	Gly	Ser	Gly	Gly	
			-		-	-	-	-		-	-	-	-		-	-	

### RAW SEQUENCE LISTING PATENT APPLICATION US/08/812,393A

DATE: 07/07/98 TIME: 09:45:46

INPUT SET: S27223.raw

															0		
100		130					135					140					
101																	
102					GCT												480
103	Gly	Gly	Ser	Glu	Ala	Ala	Val	Thr	Gln	Ser	Pro	Arg	Asn	Lys	Val		
104	145					150					155					160	
105																	
106	GTA	ACA	GGA	GGA	AAG	GTG	ACA	TTG	AGC	TGT	AAT	CAG	ACT	AAT	AAC	CAC	528
107	Val	Thr	Gly	Gly	Lys	Val	Thr	Leu	Ser	Cys	Asn	Gln	Thr	Asn	Asn	His	
108					165					170					175		
109																	
110	AAC	AAC	ATG	TAC	TGG	TAT	CGG	CAG	GAC	ACG	GGG	CAT	GGG	CTG	AGG	CTG	576
111	Asn	Asn	Met	Tyr	Trp	Tyr	Arg	Gln	Asp	Thr	Gly	His	Gly	Leu	Arg	Leu	
112				180	-	-	-		185		-		_	190			
113																	
114	ATC	CAT	TAT	TCA	TAT	GGT	GCT	GGC	AGC	ACT	GAG	AAA	GGA	GAT	ATC	CCT	624
115					Tyr												
116			195		-	-		200				-	205	-			
117																	
118	GAT	GGA	TAC	AAG	GCC	TCC	AGA	CCA	AGC	CAA	GAG	AAC	TTC	TCC	CTC	ATT	672
119					Ala												
120	p	210	- 1 -	-,-			215					220					
121		210															
122	CTG	GAG	ጥጥሮ	GCT	ACC	CCC	тст	CAG	ACA	TCA	GTG	TAC	TTC	TGT	GCC	AGC	720
123					Thr										_		
124	225	914	БСС	AIG		230	DUI	0111		501	235	- 2 -		-1-		240	
125	223					230					200						
126	CCT	CAG	A C A	aga	ACC	AAC	GAA	λGλ	מיייים	ттт	ጥጥሮ	CCT	СУТ	GGA	ACC	ΔAG	768
127					Thr												, 00
128	GLY	GIU	1111	GLY	245	ADII	GIG	n. g	200	250	1110		****	011	255	-,-	
129					243					230					233		
130	ama	mam	ama	ama.	ACT	A CITI	220	TICC	N TO	አጥር	ሞልሮ	TTC	NGC	CAC	TTC	GTG.	816
131			_		Thr												010
131	Leu	ser	Val	260	1111	Ser	ASII	Ser	265	Mec	1 1 1	1110	DCI	270	1 110	· u _	
133				200					203					2 / 0			
134	aaa	CITIC	mma	ama	CCA	acc	N N C	aaa	N.C.C	ACC	A CC	CCA	aca	ccc	CGA	CCA	864
135					Pro												001
136	PIO	Val	275	Leu	PIO	MIG	гуз	280	1111	1111	1111	110	285	110	Arg	110	
			2/3					200					203				
137	CC 3	202	aaa	aca	ccc	NCC	N THICK	ccc	TCC	CAG	ccc	стс	TCC	cric	ccc	CCA	912
138					Pro												712
139	PIO		PIO	АТЗ	PIO	THE		Ата	ser	GIH	PIU	300	Ser	Leu	Arg	FIU	
140		290					295					300					
141	mam	a am	mam	101	~ » m	000	* * *	ama	maa	ma c	ama	ama	C a m	CCA	N TO C	CMC.	960
142					GAT												360
143		Ser	ser	Arg	Asp		Lys	Leu	cys	Tyr		Leu	ASP	GIA	тте		
144	305					310					315					320	
145	mmc	• mc	m	a a ==	ama	3 mm	ama	1 am	aac	mmc	mmc	ama	3.02	ama	8 B C	mma	1000
146					GTC												1008
147	Phe	ITe	Tyr	gŢĀ	Val	тте	Leu	Thr	ата		۲ne	Leu	arg	val		rne	
148					325					330					335		
149										~			~.~			ama	1056
150					GAC												1056
151	Ser	Arg	Ser		Asp	A⊥a	Pro	Ala		GIn	GIN	GTÀ	GIN		GIN	ьeu	
152				340					3 <b>4</b> 5					350			

#### RAW SEQUENCE LISTING PATENT APPLICATION US/08/812,393A

DATE: 07/07/98 TIME: 09:45:48

#### INPUT SET: S27223.raw

														011	ET: S272.	
	AAC	ana	ama.	a a m	CITE A	CCA	CCA	A (" A	CAC	CAC	TIAC	CAT	CTT	ምምረ	GAC	1104
	Asn															1101
1 9 1	ASII	355	БСС	ASIL	пса	O. J	360	n. g	OIG	014	- , -	365		200		
AAG	AGA	CGT	GGC	CGG	GAC	CCT	GAG	ATG	GGG	GGA	AAG	CCG	AGA	AGG	AAG	1152
Lys	Arg	Arg	Gly	Arg	Asp	Pro	Glu	Met	Gly	Gly	Lys	Pro	Arg	Arg	Lys	
	370					375					380					
	CCT															1200
385	Pro	GIn	GIU	GTA	190	тyr	Asn	GIU	Leu	395	гÀг	ASP	Lys	мет	400	
303					390					373					400	
GAG	GCC	TAC	AGT	GAG	АТТ	GGG	ATG	AAA	GGC	GAG	CGC	CGG	AGG	GGC	AAG	1248
	Ala															
		•		405		-		-	410		_	_	-	415	-	
	CAC															1296
Gly	His	Asp		Leu	Tyr	Gln	Gly		Ser	Thr	Ala	Thr		Asp	Thr	
			420					425					430			
ma.c	CAC	acc	CTT	CAC	A TH CT	CAC	ccc	CTC	ccc	CCT	ccc	таас	ירממי	rca d	CACCG	1348
	Asp											IAAC			CACCO	1310
- y -	АЗР	435	пси	1110	ric c	0111	440	пса			9					
CG																1350
		(2)	INE	ORM	MOITA	1 FOR	R SEC	DID	NO: 2	2:						
	, ,	i v et	- OTTEN	יים ב	CHARA	CTE	Tem									
	( -		_		444											
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		(C)	STRA	NDEI	ONESS	5: si	ingle	•								
			mono	11001				-								
		(D)	TOPC	TOG	(; l)	inear	:									
		ii) N	OLEC	CULE	TYPE	E: pi	rotei	ln.								
		ii) N	OLEC	CULE		E: pi	rotei	ln.								
	(7	ii) N 7) FE	MOLEC RAGME	CULE ENT 1	TYPE:	E: pr	rotei	ln al	) ID	NO:	? <b>:</b>					
	(7	ii) N 7) FE	MOLEC RAGME	CULE ENT 1	TYPE	E: pr	rotei	ln al	) ID	NO:2	2:					
Leu	(7	li) N 7) FE	MOLEC RAGME SEQUE	CULE ENT T	TYPE:	E: pr : int	rotei terna TION:	ln al : SEÇ				Ile	Leu	Trp	Val	
Leu 1	(2	li) N 7) FE	MOLEC RAGME SEQUE	CULE ENT T	TYPE:	E: pr : int	rotei terna TION:	ln al : SEÇ				Ile	Leu	Trp 15	Val	
1	(2	ii) M 7) FF Ki) S Met	MOLEC RAGME SEQUE Gln	EULE ENT T ENCE Arg 5	TYPE: TYPE: DESC	E: pr : int ::RIPT	rotei erna TION:	in al SEQ	Val	Leu	Gly			15		
l Gln	() () Glu Ile	ii) M v) FF ki) S Met Cys	MOLEC RAGME SEQUE Gln Trp 20	CULE ENT T ENCE Arg 5 Leu	TYPE: DESC Asn Lys	E: pr : int CRIPT Leu Glu	rotei derna TION: Gly Gln	in al SEC Ala Gln 25	Val 10 Val	Leu Gln	Gly Gln	Ser	Pro 30	15 Ala	Ser	
l Gln	(v (z Glu	ii) M /) FF ki) S Met Cys Leu	MOLEC RAGME SEQUE Gln Trp 20	CULE ENT T ENCE Arg 5 Leu	TYPE: DESC Asn Lys	E: pr : int CRIPT Leu Glu	rotei terna TION: Gly Gln Asn	in al SEC Ala Gln 25	Val 10 Val	Leu Gln	Gly Gln	Ser Cys	Pro 30	15 Ala	Ser	
l Gln Leu	(V) (Z) Glu Ile Val	ii) M v) FF ki) S Met Cys Leu 35	MOLEC RAGME SEQUE Gln Trp 20 Gln	CULE ENT T ENCE Arg 5 Leu Glu	TYPE: TYPE: DESC Asn Lys Gly	E: pr : int CRIPT Leu Glu Glu	rotei cerna Gly Gln Asn 40	In al SEC Ala Gln 25 Ala	Val 10 Val Glu	Leu Gln Leu	Gly Gln Gln	Ser Cys 45	Pro 30 Ser	15 Ala Phe	Ser Ser	
l Gln Leu	Glu Ile Val	ii) M v) FF ki) S Met Cys Leu 35	MOLEC RAGME SEQUE Gln Trp 20 Gln	CULE ENT T ENCE Arg 5 Leu Glu	TYPE: TYPE: DESC Asn Lys Gly	E: pr : int CRIPT Leu Glu Glu	rotei cerna Gly Gln Asn 40	In al SEC Ala Gln 25 Ala	Val 10 Val Glu	Leu Gln Leu	Gly Gln Gln Arg	Ser Cys 45	Pro 30 Ser	15 Ala Phe	Ser Ser	
l Gln Leu Ile	Glu Ile Val Phe 50	ii) M	MOLEC RAGME SEQUE Gln Trp 20 Gln Asn	EULE ENT T ENCE Arg 5 Leu Glu	TYPE:  DESC  Asn  Lys  Gly  Val	E: pr : int CRIPT Leu Glu Glu Gln 55	Gly Gln Asn 40 Trp	in SEC Ala Gln 25 Ala Phe	Val 10 Val Glu Tyr	Leu Gln Leu Gln	Gly Gln Gln Arg	Ser Cys 45 Pro	Pro 30 Ser Gly	15 Ala Phe Gly	Ser Ser Arg	
l Gln Leu Ile Leu	Glu Ile Val	ii) M	MOLEC RAGME SEQUE Gln Trp 20 Gln Asn	EULE ENT T ENCE Arg 5 Leu Glu	TYPE:  DESC  Asn  Lys  Gly  Val	E: pr : int CRIPT Leu Glu Glu Gln 55	Gly Gln Asn 40 Trp	in SEC Ala Gln 25 Ala Phe	Val 10 Val Glu Tyr	Leu Gln Leu Gln Thr	Gly Gln Gln Arg	Ser Cys 45 Pro	Pro 30 Ser Gly	15 Ala Phe Gly	Ser Ser Arg Arg	
l Gln Leu Ile Leu 65	Glu Ile Val Phe 50 Val	ii) My) FF  Ki) S  Met  Cys  Leu 35  Thr	MOLEC RAGME SEQUE Gln Trp 20 Gln Asn Leu	ENT TENCE Arg 5 Leu Glu Gln Leu	TYPE: TYPE: DESC Asn Lys Gly Val Tyr 70	E: print ERIPT Leu Glu Glu Gln 55 Asn	Gly Gln Asn 40 Trp	in  SEC  Ala  Gln  25  Ala  Phe	Val 10 Val Glu Tyr	Leu Gln Leu Gln Thr	Gly Gln Gln Arg 60 Lys	Ser Cys 45 Pro Gln	Pro 30 Ser Gly Ser	15 Ala Phe Gly Gly	Ser Ser Arg Arg	
l Gln Leu Ile Leu 65	Glu Ile Val Phe 50	ii) My) FF  Ki) S  Met  Cys  Leu 35  Thr	MOLEC RAGME SEQUE Gln Trp 20 Gln Asn Leu	ENT TENCE Arg 5 Leu Glu Gln Leu	TYPE: TYPE: DESC Asn Lys Gly Val Tyr 70	E: print ERIPT Leu Glu Glu Gln 55 Asn	Gly Gln Asn 40 Trp	in  SEC  Ala  Gln  25  Ala  Phe	Val 10 Val Glu Tyr	Leu Gln Leu Gln Thr	Gly Gln Gln Arg 60 Lys	Ser Cys 45 Pro Gln	Pro 30 Ser Gly Ser	15 Ala Phe Gly Gly	Ser Ser Arg Arg	
l Gln Leu Ile Leu 65 Leu	Glu Ile Val Phe 50 Val	ii) M v) FF ki) S Met Cys Leu 35 Thr Ser	MOLEC RAGME SEQUE Gln Trp 20 Gln Asn Leu	ENT TENCE Arg 5 Leu Glu Gln Leu Thr	TYPE: DESC Asn Lys Gly Val Tyr 70 Val	E: print ERIPT Leu Glu Glu Gln 55 Asn	Gly Gln Asn 40 Trp Pro	Ala Gln 25 Ala Phe Ser Glu	Val 10 Val Glu Tyr Gly Arg 90	Leu Gln Leu Gln Thr 75 Arg	Gly Gln Gln Arg 60 Lys Ser	Ser Cys 45 Pro Gln Ser	Pro 30 Ser Gly Ser Leu	15 Ala Phe Gly Gly His 95	Ser Ser Arg Arg 80 Ile	

## RAW SEQUENCE LISTING PATENT APPLICATION US/08/812,393A

DATE: 07/07/98 TIME: 09:45:50

INPUT SET: S27223.raw Ser Gly Gly Ser Asn Ala Lys Leu Thr Phe Gly Lys Gly Thr Lys Leu Ser Val Lys Ser Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ala Ala Val Thr Gln Ser Pro Arg Asn Lys Val Ala Val Thr Gly Gly Lys Val Thr Leu Ser Cys Asn Gln Thr Asn Asn His Asn Asn Met Tyr Trp Tyr Arg Gln Asp Thr Gly His Gly Leu Arg Leu Ile His Tyr Ser Tyr Gly Ala Gly Ser Thr Glu Lys Gly Asp Ile Pro Asp Gly Tyr Lys Ala Ser Arg Pro Ser Gln Glu Asn Phe Ser Leu Ile Leu Glu Leu Ala Thr Pro Ser Gln Thr Ser Val Tyr Phe Cys Ala Ser Gly Glu Thr Gly Thr Asn Glu Arg Leu Phe Phe Gly His Gly Thr Lys Leu Ser Val Leu Thr Ser Asn Ser Ile Met Tyr Phe Ser His Phe Val Pro Val Phe Leu Pro Ala Lys Pro Thr Thr Pro Ala Pro Arg Pro Pro Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro Leu Ser Leu Arg Pro Ser Ser Arg Asp Pro Lys Leu Cys Tyr Leu Leu Asp Gly Ile Leu Phe Ile Tyr Gly Val Ile Leu Thr Ala Leu Phe Leu Arg Val Lys Phe Ser Arg Ser Ala Asp Ala Pro Ala Tyr Gln Gln Gly Gln Asn Gln Leu Tyr Asn Glu Leu Asn Leu Gly Arg Arg Glu Glu Tyr Asp Val Leu Asp Lys Arq Arq Gly Arq Asp Pro Glu Met Gly Gly Lys Pro Arg Arg Lys Asn Pro Gln Glu Gly Leu Tyr Asn Glu Leu Gln Lys Asp Lys Met Ala Glu Ala Tyr Ser Glu Ile Gly Met Lys Gly Glu Arg Arg Arg Gly Lys Gly His Asp Gly Leu Tyr Gln Gly Leu Ser Thr Ala Thr Lys Asp Thr Tyr Asp Ala Leu His Met Gln Ala Leu Pro Pro Arg (2) INFORMATION FOR SEQ ID NO:3: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 24 base pairs 

- (A) LENGIN: 24 Dase pai
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- 256 (D) TOPOLOGY: linear

(vi) ORIGINAL SOURCE:



DATE: 07/07/98 TIME: 09:45:53

INPUT SET: S27223.raw

Line

Error

Original Text